

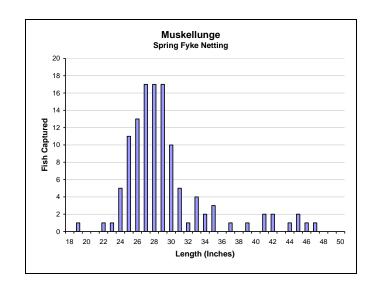
# Mid-Spring Fyke Netting Survey Summary Tiger Cat Chain of Lakes, Sawyer County, 2011

The Hayward DNR Fisheries Management Team conducted a fyke netting survey on the Tiger Cat Chain of Lakes during May 10-18, 2011 as part of our baseline monitoring program. We set 11 nets overnight for four nights, resulting in 44 net-nights of effort. Our primary target species was muskellunge, the dominant gamefish in this system; but we also obtained useful data on the status of northern pike and black crappie. We did not try to target walleyes with an early-spring fyke netting survey, because there are so few walleyes in this system. An electrofishing survey conducted by our team in early June documented the status of largemouth bass, bluegill and other species. Those results are summarized in a separate survey report. Quality, preferred, and memorable sizes referenced in this summary are based on standard proportions of world record lengths developed for each species by the American Fisheries Society.

## Muskellunge



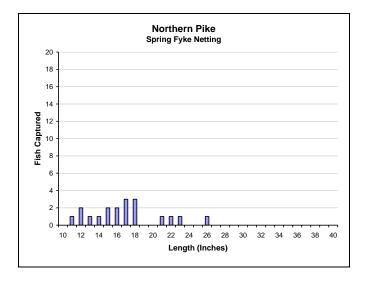
Captured 2.7 per net-night ≥ 20"		
Quality Size ≥ 30"	31%	
Memorable Size ≥ 42"	6%	



#### **Northern Pike**



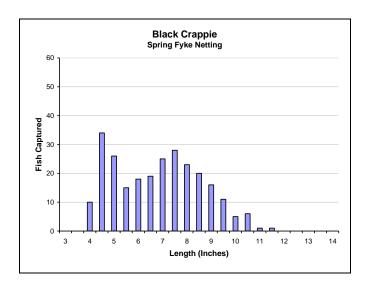
Captured 0.3 per net-night ≥ 14"		
Quality Size ≥ 21"	27%	
Preferred Size ≥ 28"	0%	



# **Black Crappie**



Captured 5.9 per net-night ≥ 5"		
Quality Size ≥ 8"	39%	
Preferred Size ≥ 10"	6%	



### **Summary of Results**

In the spring of 2011 water levels were normal and the Tiger Cat Chain had an abundance of high-quality muskellunge nursery habitat (flooded wetlands and marsh areas). Water temperatures remained in the high 50s (F) during our survey; and we believe we obtained a representative sample of our target species – adult muskellunge.

Muskellunge capture rate was high (2.7 per net-night), and 6% were of memorable size  $\geq$  42 inches. Most muskellunge were 24-31 inches long, reflecting high natural recruitment, slow growth, or both in recent years. The Tiger Cat Chain continues to be a valued and unique resource – a "go to" lake where young or novice anglers may encounter their first muskellunge.

Tiger Cat Chain anglers have voiced concerns over development of a northern pike population that could threaten natural recruitment of muskellunge. However, our capture rate of northern pike ≥ 14 inches was relatively low (0.3 per net-night). Despite sub-optimal survey timing for northern pike (ice-out conditions preferred), we are confident that 44 net-nights of effort throughout the system would have detected a more prominent pike population if present. Pike exist in the Tiger Cat Chain, but not in overwhelming numbers that may be detrimental to other species. Nevertheless, we encourage anglers to harvest northern pike liberally (no length limit, daily bag limit of 5) in order to maintain dominance by the more-preferred muskellunge.

We captured black crappies  $\geq 5$  inches at a low rate of 5.9 per net-night – most only 5.5 to 9.5 inches long. The relatively high proportion of small crappies is typical of lakes where walleye density – and predation by walleyes – is low. Largemouth bass, northern pike, and muskellunge generally are ineffective in controlling crappie recruitment. With insufficient predation to thin their numbers when young, most crappies in this system grow too slowly to reach preferred size.

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